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## ● New records and distribution updates of *Helota* species from China (Coleoptera: Cucujoidea: Helotidae)

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**Abstract:** This article reports two new distribution records for Helotidae species: *Helota feai* Ritsema, 1891, as a new record for China, and *Helota thoracica* Ritsema, 1895, as a new record for Chongqing Municipality. It also provides color photographs of the male genitalia and key diagnostic characteristics of *H. thoracica*.

**Keywords:** China, Helotidae, morphology, new record, taxonomy

## ● 中国蜡斑甲属物种新纪录及分布更新（鞘翅目：扁甲总科：蜡斑甲科）

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**摘要：**本文报导了两种蜡斑甲科物种的新分布记录：费氏蜡斑甲 *Helota feai* Ritsema, 1891 为中国新记录种，胸凸蜡斑甲 *Helota thoracica* Ritsema, 1895 为重庆市新记录种。本文也提供了胸凸蜡斑甲的雄性外生殖器及其他关键鉴别特征的彩色照片。

**关键词：**中国，蜡斑甲科，形态学，新记录，分类学

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## Introduction

Helotidae is a small family of Coleoptera within the superfamily Cucujoidea. So far, 105 species and subspecies are known worldwide (Lee 2008). Its geographical distribution is restricted to the tropical and subtropical regions of the Old World, excluding New Guinea and Australia (Wegrzynowicz 2000). Studies on this family began in the early 19th century when MacLeay (1825) described the genus *Helota* along with the new species *Helota vigorsii* as its type species. Lee (2007) proposed three species groups within this genus: the *gemmata* group (8 species), the *vigorsii* group (13 species and 2 subspecies), and the *thibetana* group (9 species). Before this study, sixteen species of *Helota* have been recorded in China (Lee 2009; Lee *et al.* 2017).

During a forest pest survey in Mt. Jinfoshan, Chongqing of this year, the author collected two specimens identified as *Helota thoracica* Ritsema, 1895. Meanwhile, a female specimen of *Helota feai* Ritsema, 1891 was obtained from Yunnan Province. Both species belong to the *vigorsii* species-group. Considering *H. feai* has not yet been recorded in China and *H. thoracica* is a new record for Chongqing, I have decided to report both species as new national and municipal records, accompanied by their illustrations.

## Material and methods

The specimens examined in this study are deposited in the Invertebrate collection of Chongqing Normal University, Chongqing, China (CNU). The labels of the specimens are in Chinese. In this paper, English translation of these labels were provided in quotation marks (“”). Individual labels are separated by double slashes (/), and additional notes are in bracket ([ ]). Habitus images were taken using a Canon R6 camera with Canon RF 24-105mm F4 L IS USM Lens and a close-up ring, while characteristic images were taken with a KEYENCE-VHX-5000. All images were subsequently modified and arranged into plates using Adobe Photoshop CC 2019.

## Taxonomy

### Genus *Helota* MacLeay, 1825 蜡斑甲属

#### *Helota feai* Ritsema, 1891 费氏蜡斑甲

Fig. 1A, B

*Helota feae* Ritsema, 1891: 886; Ritsema 1894: 103; Ritsema 1911: 105; Ritsema 1915a: 127; Ritsema 1915b: 229.

*Helota feai*: Wegrzynowicz 2000: 397; Lee 2008: 737.

**Type locality.** Carin Cheba (in Myanmar).

**Material examined.** 1♀ (CNU), “CHINA, Yunnan: Pu’er City, Menglian County” [in Chinese] // “2024.II-20.”

**Distribution.** China (Yunnan) [new national record]; Myanmar, Laos, Thailand.

**Remarks.** This species has a relatively widespread distribution in the Mainland Southeast Asia, including Myanmar, Laos and Thailand. The new record presented herein is from Pu’er City, Yunnan Province, Southwest China.

#### *Helota thoracica* Ritsema, 1895 胸凸蜡斑甲

Figs 1C–F; 2A–F

*Helota thoracica* Ritsema, 1895: 49; Ritsema 1905: 217; Ritsema 1915b: 229; Wegrzynowicz 2000: 404; Lee *et al.* 2006: 547; Lee 2008: 740.

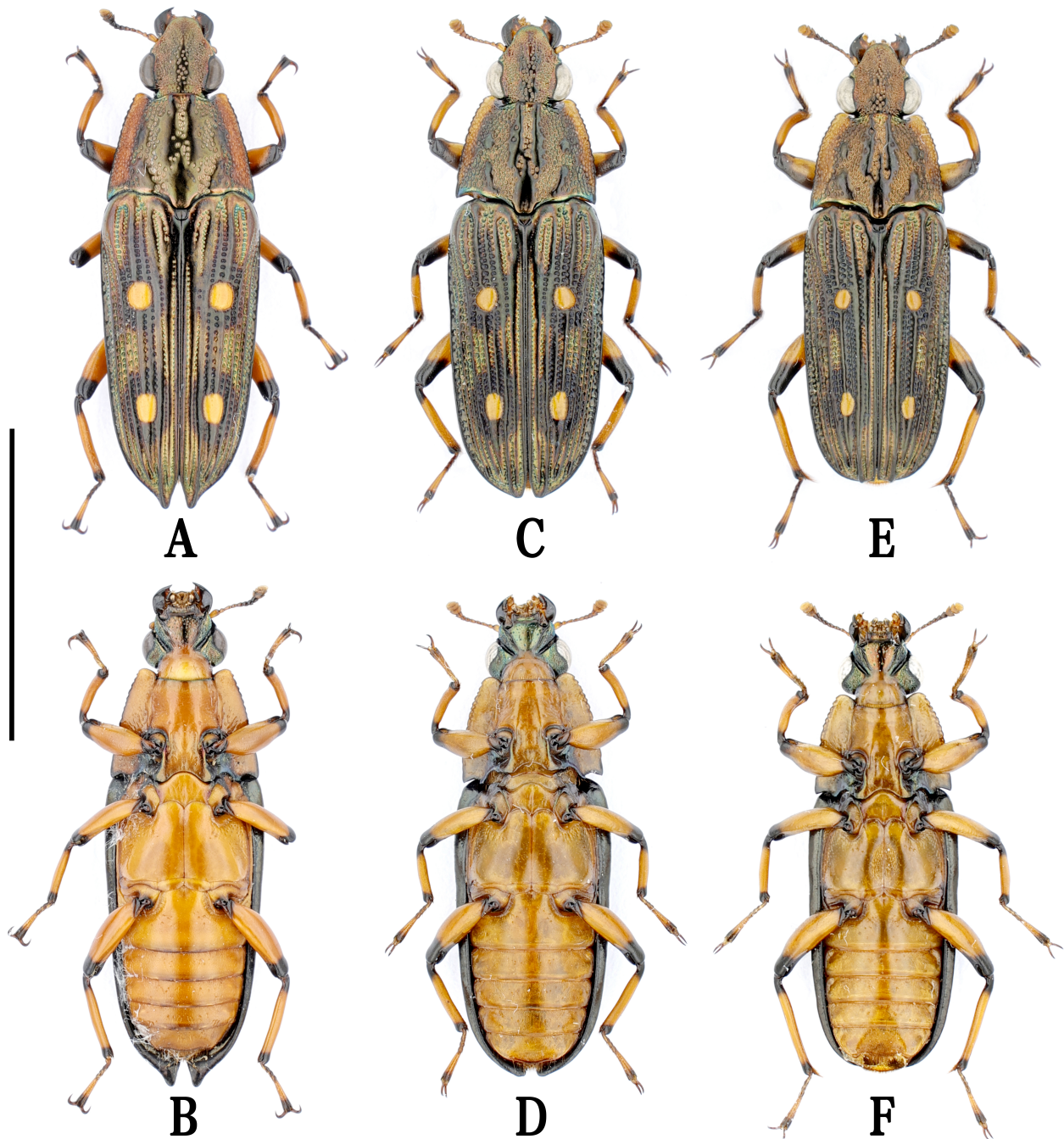
**Type locality.** “Thibet: Siào-Lôu” [Xiao lu, a path from Tianquan to Luding, near Mt. Maanshan, in Tianquan. Sichuan (Qiu, Xu & Hu 2013)].

**Material examined.** 1♀1♂ (CNU), “CHINA, Chongqing: Nanchuan District, North slope of Mt. Jinfoshan” [in Chinese] // “alt.1400m 2024. VI-19, Tian-Xuan Gu leg.”

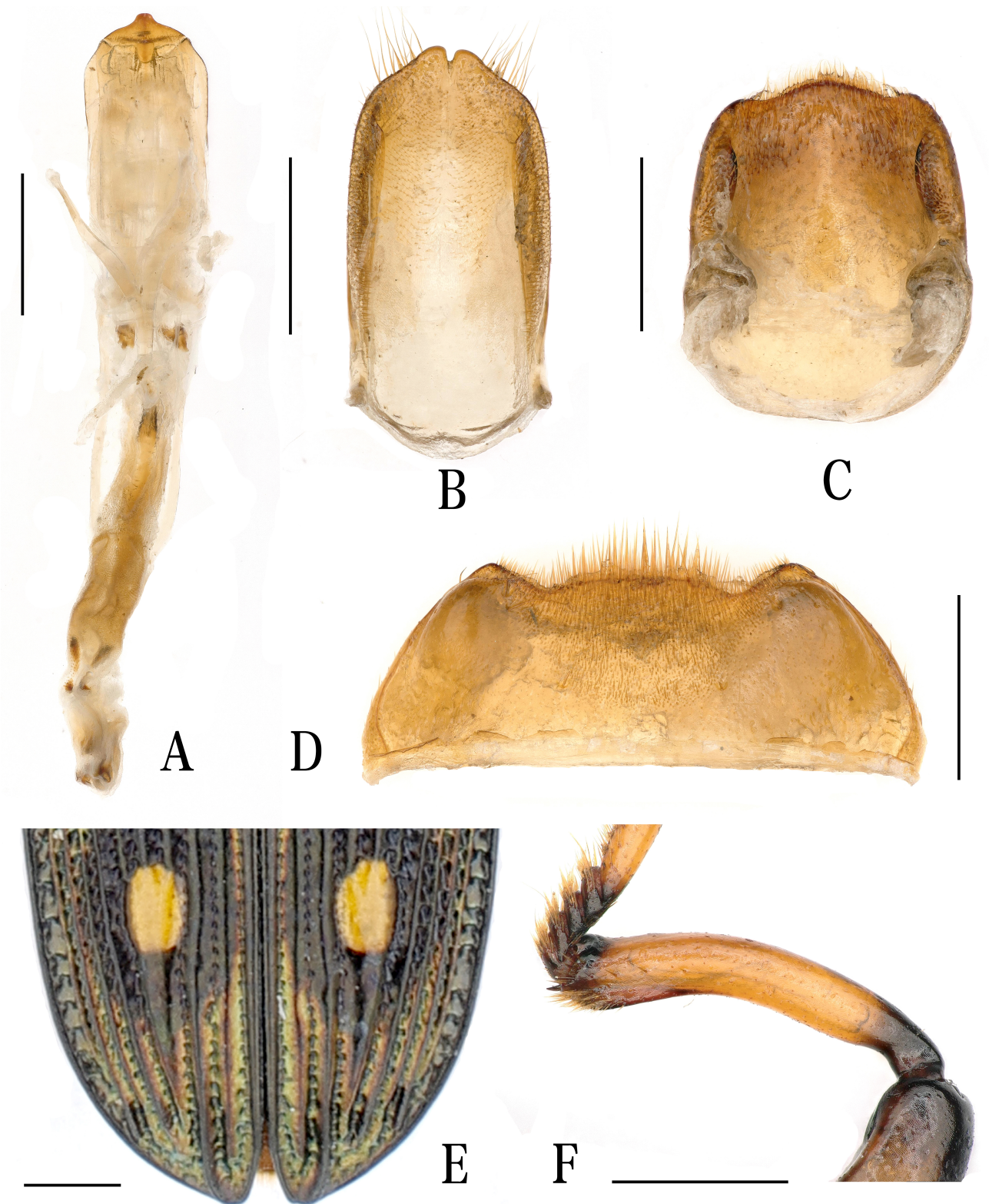


**Distribution.** China (Sichuan, Jiangxi, Fujian, Chongqing [new municipal record], Taiwan, Hainan); Vietnam, Laos, Thailand.

**Remarks.** Both specimens were found on weeping willows with sap exuding from the trees along the roadside, and they were observed feeding on the sap alongside some stag beetles when collected (Fig 3A, B). Unlike other *H. thoracica* specimens (Lee 2008; Lee & Satô 2006), those from Chongqing exhibit a more vivid gloss on the elytra, and the female have blunter elytral apices.



**FIGURE 1.** Habitus of *Helota* spp.: **A, B** *Helota feai*, ♀, dorsal and ventral views **C, D** *Helota thoracica*, ♀, dorsal and ventral views **E, F** ditto, ♂, dorsal and ventral views. Scale bar = 1 cm for all.



**FIGURE 2.** Diagnostic characteristics of *H. thoracica*: **A** penis **B** parameres **C** eighth abdominal ventrite, ♂ **D** fifth abdominal ventrite, ♂ **E** elytral apices, ♀ **F** protibia, ♂. Scale bars = 1 mm.





**FIGURE 3.** A habitat of *H. thoracica* from Mt. Jinfoshan **B** the sap-exuding willows on which this species was found.

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## Additional information

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